

# ACADEMY VILLAGE FILING NO. 3

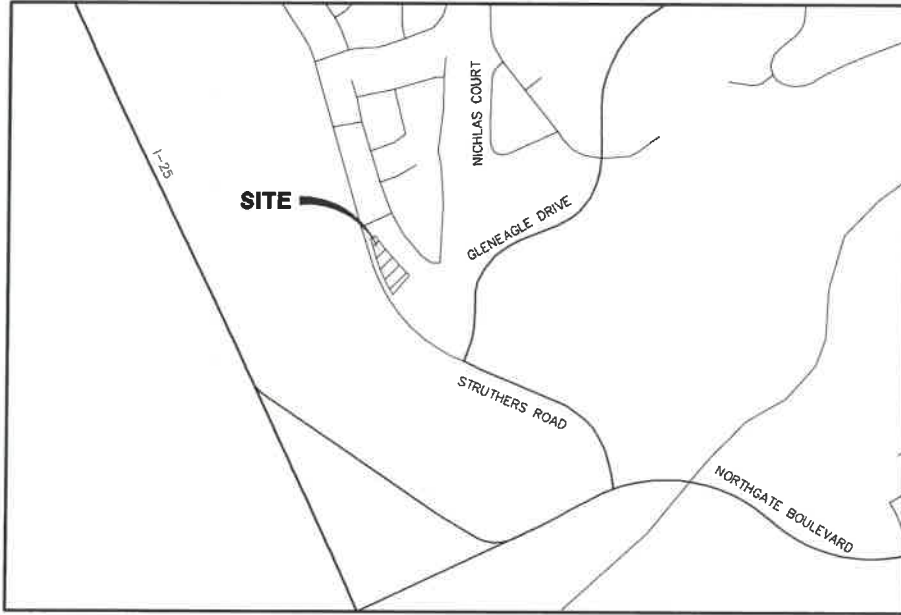
## LOT 4, "ACADEMY VILLAGE FILING NO. 2" BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 1, TOWNSHIP 12 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO

### GRADING AND EROSION CONTROL PLAN

#### GRADING AND EROSION CONTROL STANDARD NOTES

1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PLANNING AND COMMUNITY DEVELOPMENT AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS.
2. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
3. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
4. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY PCD INSPECTIONS STAFF.
6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
8. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
9. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
11. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
12. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
13. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
14. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
18. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
19. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
22. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.) IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS.
27. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

Colorado Department of Public Health and Environment  
Water Quality Control Division  
WOOD - Permits  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Attn: Permits Unit



VICINITY MAP  
SCALE: 1"=500'

#### SHEET INDEX

- 1 COVER SHEET
- 2 GEC PLAN
- 3 DETAILS
- 4 POND GRADING PLAN
- 5 OUTLET STRUCTURE DETAILS

#### AGENCIES

OWNER/DEVELOPER:	RON COVINGTON HOMES 13725 STRUTHERS ROAD, SUITE 200 COLORADO SPRINGS, CO 80920 RON COVINGTON, 719-491-1220
CIVIL ENGINEER:	JR ENGINEERING, LLC 3730 SINTON ROAD, SUITE 219 COLORADO SPRINGS, COLORADO 80907 GLENN ELLIS, PE (303) 267-6241
ENGINEERING DIVISION:	EL PASO COUNTY PUBLIC SERVICES DEPARTMENT BROWN TRANSPORTATION & ENVIRONMENTAL CONFERENCE 3255 AKERS DRIVE COLORADO SPRINGS, COLORADO 80903 (719)-520-6460
TRAFFIC ENGINEERING:	EL PASO COUNTY PUBLIC SERVICES DEPARTMENT BROWN TRANSPORTATION & ENVIRONMENTAL CONFERENCE 3255 AKERS DRIVE COLORADO SPRINGS, COLORADO 80903 (719)-520-6460
PLANNING & DEVELOPMENT:	EL PASO COUNTY PLANNING & COMMUNITY DEVELOPMENT: 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, COLORADO 80947 (719) 520-6300
GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 1521 HANCOCK EXPRESSWAY COLORADO SPRINGS, COLORADO 80947 TONY COLVIN (719) 668-5768
ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E WOODMEN RD. PEYTON, COLORADO 80831 (719) 495-2283
TELEPHONE COMPANY:	CENTURY LINK (LOCATORS) (719) 597-8418 A.T.& T. (LOCATORS) (719) 635-3674
FIRE DEPARTMENT:	DONALD WESCOTT FIRE PROTECTION DISTRICT ST#1 15415 GLEENAGLE DRIVE COLORADO SPRINGS, CO 80921 VINNY BURNS (719) 488-8680
WATER AND SANITARY	DONALD WATER & SANITATION DISTRICT 15850 HOLNEINE DRIVE COLORADO SPRINGS, CO 80921 ROBERT HULL JR. (719) 488-3603

#### OWNER'S STATEMENT

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

*Ronald Covington* 5-3-2018  
NAME DATE

#### ENGINEER'S STATEMENT

THE GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

*Glenn D. Ellis*  
38861  
May 3, 2018

GLENN D. ELLIS P.E.  
COLORADO P.E. 38861  
FOR AND ON BEHALF OF JR ENGINEERING

#### EL PASO COUNTY

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

Approved  
El Paso County Planning and Community Development  
by Jennifer Irvine, P.E., County Engineer / ECM Administrator  
07/30/2018 12:37:15 PM

BY DATE

No. REVISION

N/A N/A

DATE 05/03/18

DESIGNED BY

DRAWN BY

CHECKED BY

ACADEMY VILLAGE FILING NO. 3  
GRADING AND EROSION CONTROL PLAN  
COVER SHEET

SHEET 1 OF 5

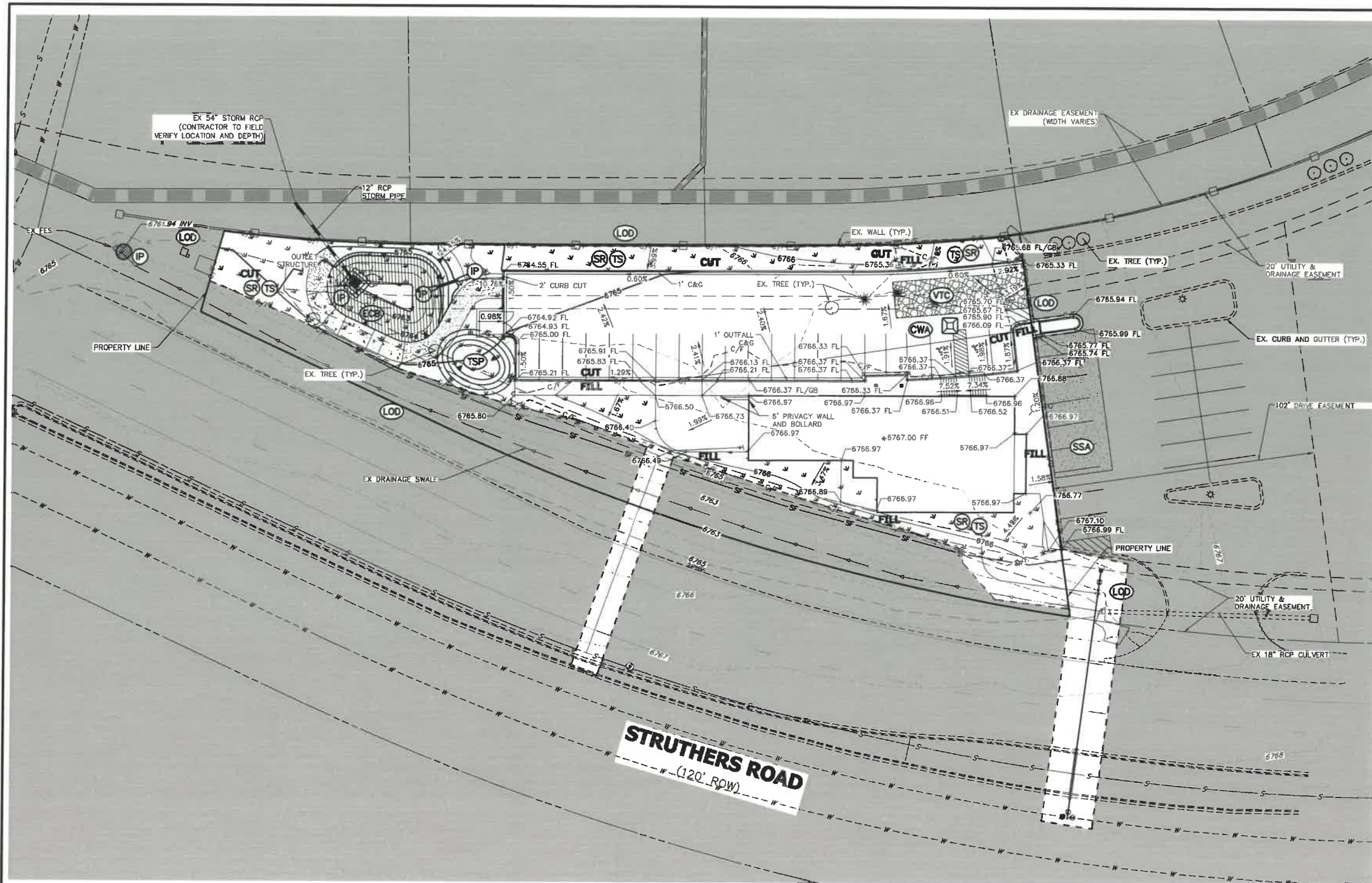
JOB NO. 25123.00

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
RON COVINGTON HOMES  
13725 STRUTHERS ROAD, SUITE 200  
COLORADO SPRINGS, CO 80920  
CONTACT: RON COVINGTON  
719-491-1220

J.R. ENGINEERING  
A Wharton Company  
Central 303-740-9888 • Colorado Springs 719-500-2688  
Fort Collins 970-491-9888 • www.jrengineering.com





**GESC PLAN LEGEND**

SURFACE ROUGHENING/ TEMPORARY SEEDING		NON-IRRIGATED DROUGHT TOLERANT NATIVE GRASSES	
SILT FENCE			
VEHICLE TRACKING CONTROL			
STABILIZED STAGING AREA			
CONCRETE WASHOUT AREA			
INLET PROTECTION			
TEMPORARY STOCKPILE			
FLOW DIRECTION			
LIMITS OF DISTURBANCE			

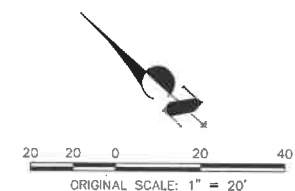
**LEGEND**

EXISTING CONTOURS		6100
PROPOSED INDEX CONTOURS		6100
PROPOSED INTERMEDIATE CONTOURS		
PROPOSED STORM SEWER		
PROPOSED INLET		
FINISHED GRADE ELEVATION	XX.XX	
LOW POINT ELEVATION	XX.XX LP	
HIGH POINT ELEVATION	XX.XX HP	
RIGHT OF WAY ELEVATION	XX.XX ROW	
GRADE BREAK ELEVATION	XX.XX GB	
FLOW LINE ELEVATION	XX.XX FL	
PROPOSED RIDGELINE		
LIMITS OF DISTURBANCE		
EROSION CONTROL BLANKET		
CUT-FILL LIMITS		C/F

**GESC PLAN NOTES**

- SEE COVER SHEET FOR EL PASO COUNTY GRADING AND EROSION CONTROL NOTES. THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ACCESS TO UTILITY FACILITIES. ADDITIONALLY, THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO UTILITY FACILITIES TO ACCOMMODATE THE PLAN, MUST BE DISCUSSED AND AGREED TO BY THE AFFECTED UTILITY PRIOR TO IMPLEMENTING THE PLAN. THE RESULTING COST TO RELOCATE OR PROTECT UTILITIES, OR PROVIDE INTERIM ACCESS IS AT THE EXPENSE OF THE PLAN APPLICANT.
- ENTIRE SITE IS OUTSIDE OF THE 100 YEAR FLOOD PLAIN
- CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS INCLUDING A COUNTY R.O.W. PERMIT.
- CONTRACTOR RESPONSIBLE FOR CONTROLLING ALL STORMWATER AND EROSION IMPACTED OR ORIGINATING FROM CONSTRUCTION ACTIVITIES ON SITE, IMPLEMENTING THIS GEC PLAN, MAINTAINING & REMOVING BMP'S, AND ESTABLISHING FINAL STABILIZATION OF THE SITE. CHANGES TO THIS PLAN AND ITS IMPLEMENTATION INCLUDING MODIFICATIONS, ADDITIONAL BMP'S OR REMOVAL OF PROPOSED BMP'S, SHALL BE BY THE CONTRACTOR IF NECESSARY TO CONTROL STORMWATER AND EROSION BASED ON ACTUAL SITE CONDITIONS AND PHASING.

LAND DISTURBANCE		
	VOLUME (CY)	AREA (AC)
CUT	315	0.34
FILL	222	0.22
NET	93 (CUT)	N/A



**OWNER'S STATEMENT:**

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

*[Signature]* 5-3-18  
NAME DATE

**ENGINEER'S STATEMENT:**

THE GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

*[Signature]*  
GLENN D. ELLIS P.E.  
COLORADO P.E. 38861  
FOR AND ON BEHALF OF JR ENGINEERING

DATE: May 3, 2018

UNTIL SUCH TIME AS APPROVED BY THE APPROPRIATE ENGINEERING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**RON COVINGTON HOMES**  
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NO.	REVISION	BY	DATE
1	RAB		
2	RAB		

H-SCALE: 1" = 20'  
V-SCALE: N/A  
DATE: 05/03/18  
DESIGNED BY: AJH  
DRAWN BY: AJH  
CHECKED BY:

ACADEMY VILLAGE FILING NO. 3

GRADING AND EROSION CONTROL PLAN  
GEC PLAN

SHEET 2 OF 5  
JOB NO. 25123.00

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**Shallow Slope**  
On shallow slopes, strips of netting may be applied across the slope.

Where there is a berm at the top of the slope, bring the netting over the berm and anchor it behind the berm.

**Steep Slope**  
On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely.

Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals.

**Ditch**  
In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch.

City of Colorado Springs Storm Water Quality  
Figure ECB-1 Erosion Control Blanket Application Examples  
3-22

**Anchor Slot** Bury the up-channel end of the net in a 6" deep trench. Tamp the soil firmly. Staple at 12" intervals across the net.

**Overlap** Overlap edges of the strips at least 4". Staple every 3 feet down the center of the strip.

**Joining Slope** Insert the new roll of net in a trench, or with the Anchor Slot. Overlap the up-channel end of the net into a 6" trench and turn the end under 6". Staple the end of the previous roll just below the anchor slot and at the end of 12" intervals.

**Check Slots** On erodible soils or steep slopes, check slots should be made every 15 feet. Insert a fold of the net into a 6" trench and tamp firmly. Staple at 12" intervals across the net. Lay the net smoothly on the surface of the soil - do not stretch the net, and do not allow wrinkles.

**Anchoring End At Structure** Place the end of the net in a 6" slot on the up-channel side of the structure. Fill the trench and tamp firmly. Roll the net up the channel. Place staples at 12" intervals along the anchor end of the net.

City of Colorado Springs Storm Water Quality  
Figure ECB-2 Erosion Control Blanket Installation Requirements  
3-23

**FILTER FABRIC INLET PROTECTION**

**FILTER FABRIC INLET PROTECTION NOTES**

**INSTALLATION REQUIREMENTS**

- INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
- SEE SILT FENCE FIGURE SF-2 FOR INSTALLATION REQUIREMENTS.
- POSTS ARE TO BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

**MAINTENANCE REQUIREMENTS**

- CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL AND WEEKLY DURING PERIODS OF NO RAINFALL.
- DAMAGED, COLLAPSED, UNINTRENCHED OR IMPROPERLY INSTALLED INLET PROTECTION SHALL BE PROMPTLY REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED FROM BEHIND FILTER FABRIC WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
- FILTER FABRIC PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED IN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality  
Figure IP-1 Filter Fabric Inlet Protection Construction Detail and Maintenance Requirements  
3-25

**RECOMMENDED ANNUAL GRASSES**

SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIVE SEED (PLS) (PUNDRS)	PLANTING DEPTH (INCHES)
1. COATS	COOL	MARCH 15 - APRIL 30	25-50	1-2
2. SPRING WHEAT	COOL	MARCH 15 - APRIL 30	25-50	1-2
3. SPRING BARLEY	COOL	MARCH 15 - APRIL 30	25-50	1-2
4. ANNUAL RYEGRASS	COOL	MARCH 15 - JUNE 30	10-15	1/2
5. MILLET	WARM	MAY 15 - JULY 15	3-15	1/2-3/4
6. BUDAGRASS	WARM	MAY 15 - JULY 15	5-10	1/2-3/4
7. BORGHUM	WARM	MAY 15 - JULY 15	1-15	1/2-3/4
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-25	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-25	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-25	1-2
11. TRITICALE	COOL	SEPTEMBER 1 - 30	25-40	1-2

THIS TABLE WAS TAKEN FROM LDCO FOR RECOMMENDED ANNUAL GRASSES FOR THE DENVER METROPOLITAN AREA. THIS TABLE MAY BE USED UNLESS A SITE-SPECIFIC SEED MIX IS REQUESTED AND APPROVED.

**TABLES-1**

**TEMPORARY SEEDING NOTES**

**INSTALLATION REQUIREMENTS**

- DISTURBED AREAS ARE TO BE SEED WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
- IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
- SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEED. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENED.
- SEEDING DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
- ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NONNATIVE WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAPWEED, PURPLE LOOSESTRIFE, EUROPEAN BIRCH, JOHNSON GRASS, AND LEAFY SPURGE.
- TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
- SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
- ALL SEEDING AREAS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING).
- IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID WEEDS BEING RECAPSULATED IN THE MULCH.

**MAINTENANCE REQUIREMENTS**

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDING AREAS TO ENSURE GROWTH.
- AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEED AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
- SEEDING AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

City of Colorado Springs Stormwater Quality  
Figure TS-1 Temporary Seeding Construction Detail and Maintenance Requirements  
3-47

**MULCHING NOTES**

**INSTALLATION REQUIREMENTS**

- ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDING AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.
- MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED-FREE LONG STEMS FIELD OR MASH MAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
- HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
- MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
- MULCH IS TO BE ANCHORED EITHER BY COMBING/TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.
- HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FINE SURFACE WATER.

**MAINTENANCE REQUIREMENTS**

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
- MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEED.

City of Colorado Springs Stormwater Quality  
Figure MU-1 Mulching Construction Detail and Maintenance Requirements  
3-48

**SILT FENCE**

**SILT FENCE NOTES**

**INSTALLATION REQUIREMENTS**

- SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
- METAL POSTS SHALL BE "STUDDED" TYPE OR "Y" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAL FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
- WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPPER SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG. THE WIRE OR HOOD RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 7" ABOVE THE ORIGINAL GROUND SURFACE.
- ALONG THE TOP OF FILL, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND REINFORCE TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOP OF THE FILL IS RECOMMENDED.
- THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY WINDUP VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

**MAINTENANCE REQUIREMENTS**

- CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNINTRENCHED OR IMPROPERLY INSTALLED SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCES WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
- SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality  
Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements  
3-38

**Top View of Silt Fence Posts Detail**

Refer to 'Top View of Silt Fence Posts Detail'

City of Colorado Springs Stormwater Quality  
Figure SF-3 Silt Fence Joint Tying Construction Detail and Maintenance Requirements  
3-39

**SURFACE ROUGHENING NOTES**

**APPLICATION TECHNIQUES**

- STAR STEP GRADING - USED ON SLOPES WITH GRADIENTS BETWEEN 3:1 AND 2:1 AND FOR SOIL CONTAINING A LARGE AMOUNT OF SMALL ROCKS. STARS ARE TO BE WIDE ENOUGH TO WORK WITH STANDARD EARTH-MOVING EQUIPMENT.
- GROOVE CUTTING - USED ON SLOPES WITH GRADIENTS BETWEEN 3:1 AND 2:1. GROOVES ARE TO BE AT LEAST 3 INCHES DEEP AND NO MORE THAN 15 INCHES APART.
- TRACKING - USED ON SOILS WITH HIGHER SAND CONTENT DUE TO COMPACTION BY HEAVY MACHINERY.

**MAINTENANCE REQUIREMENTS**

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL SURFACE ROUGHENED AREAS.
- SURFACE ROUGHENING IS TO BE REPEATED AS OFTEN AS NECESSARY.
- VEHICLES OR EQUIPMENT IS NOT TO BE DRIVEN OVER AREAS THAT HAVE BEEN ROUGHENED.
- AS SURFACE ROUGHENING IS ONLY A TEMPORARY CONTROL, ADDITIONAL TREATMENTS MAY BE NECESSARY TO MAINTAIN THE SOIL SURFACE IN A ROUGHENED CONDITION.

City of Colorado Springs Stormwater Quality  
Figure SR-1 Surface Roughening Construction Detail and Maintenance Requirements  
3-45

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**RON COVINGTON HOMES**  
13725 STRATHERS ROAD, SUITE 200  
COLORADO SPRINGS, CO 80920  
CONTACT: RON COVINGTON  
719-491-1220

**J.R. ENGINEERING**  
A Weidman Company  
Central: 303-746-9888 • Colorado Springs: 719-580-2560  
Fort Collins: 970-491-8888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	NO.	REVISION	BY		DATE	
								RAB	RAB		
N/A	N/A	05/03/18	NQJ	NQJ							

ACADEMY VILLAGE FILING NO. 3

GRADING AND EROSION CONTROL DETAILS

SHEET 3 OF 5  
JOB NO. 25123.00

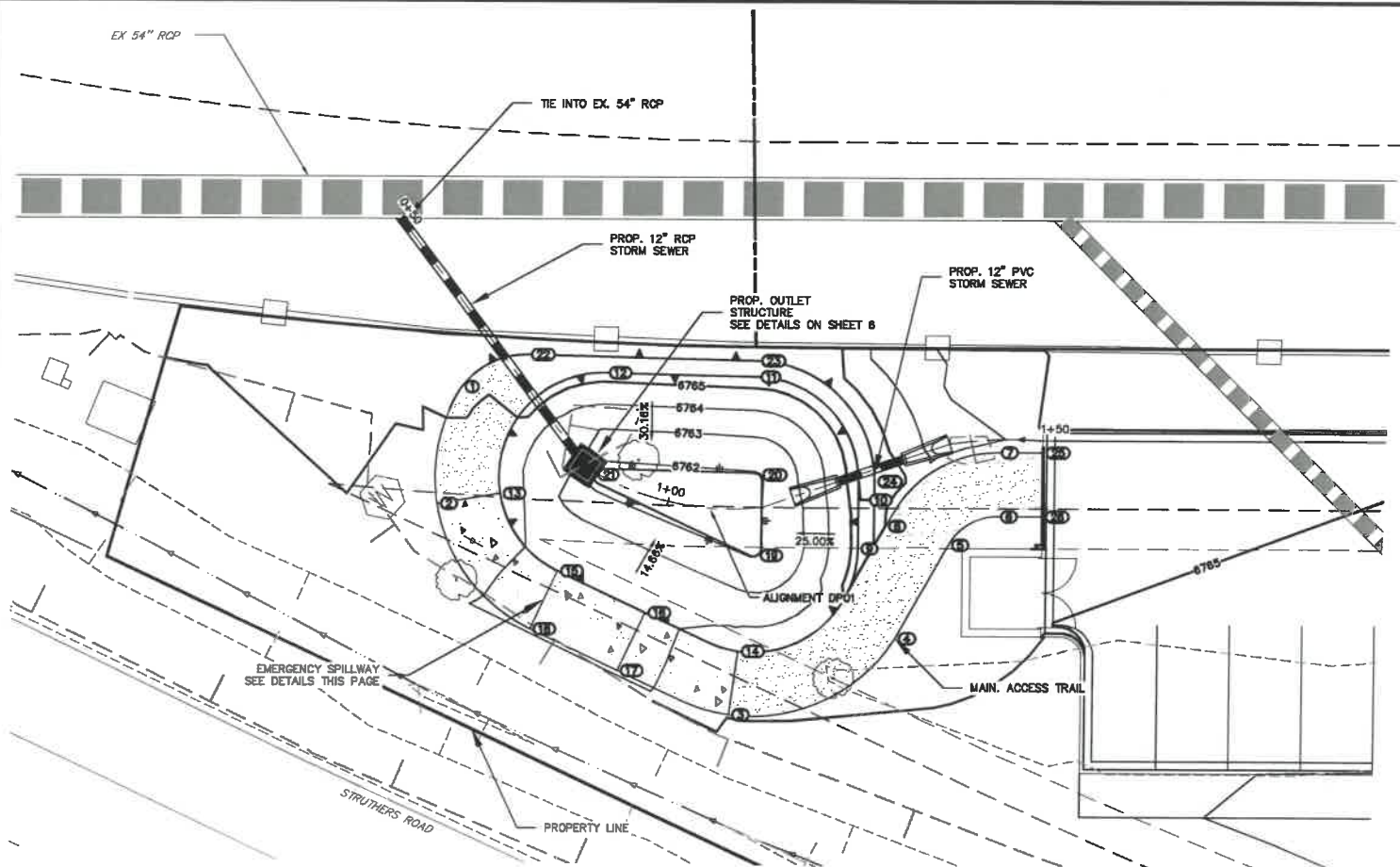
**ENGINEER'S STATEMENT**

STANDARD DETAILS SHOWN WERE REVIEWED AND FOUND TO BE APPLICABLE TO THIS PROJECT.

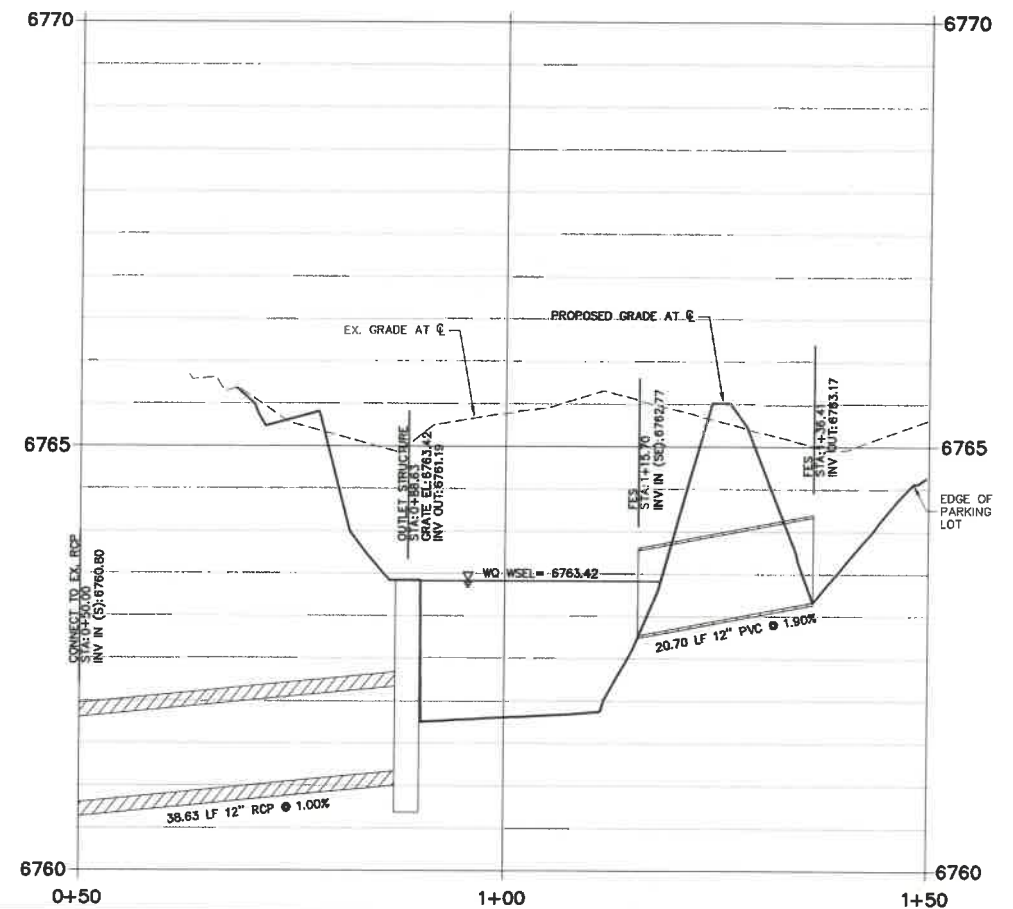
Glenn E. Ellis, P.E.  
COLORADO P.E. 38861  
FOR AND ON BEHALF OF JR ENGINEERING

May 3, 2018

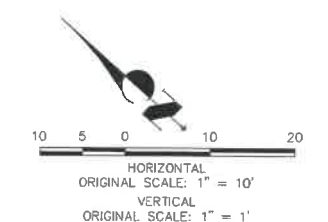
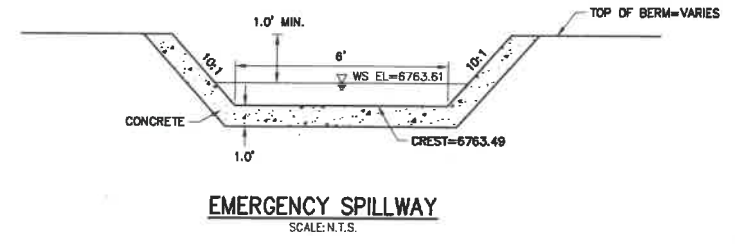
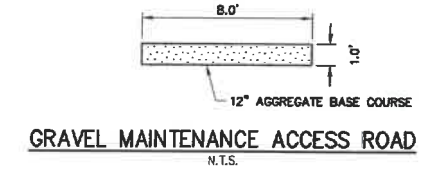




**DP01 PROFILE  
STA 0+50.00 TO 1+50.00**



POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
1	MAINT. PATH	N: 6455.12 E: 9523.23	6765.16
2	MAINT. PATH	N: 6447.63 E: 9510.37	6764.93
3	MAINT. PATH	N: 6402.76 E: 9515.13	6764.84
4	MAINT. PATH	N: 6393.71 E: 9536.01	6764.84
5	MAINT. PATH	N: 6396.59 E: 9549.12	6764.84
6	MAINT. PATH	N: 6394.41 E: 9555.86	6764.84
7	MAINT. PATH	N: 6399.72 E: 9561.84	6764.83
8	MAINT. PATH	N: 6404.06 E: 9545.61	6765.00
9	TOP	N: 6404.71 E: 9541.23	6765.30
10	TOP	N: 6410.29 E: 9547.50	6765.51
11	TOP	N: 6428.41 E: 9548.79	6765.51
12	TOP	N: 6442.80 E: 9536.60	6765.41
13	TOP	N: 6442.59 E: 9516.58	6764.93
14	TOP	N: 6407.21 E: 9521.78	6764.84
15	OVERFLOW	N: 6430.71 E: 9514.21	6763.49
16	OVERFLOW	N: 6419.07 E: 9517.66	6763.49
17	OVERFLOW	N: 6416.80 E: 9509.99	6763.49
18	OVERFLOW	N: 6428.44 E: 9506.54	6763.49
19	TOE	N: 6413.50 E: 9532.23	6761.99
20	TOE	N: 6420.02 E: 9539.88	6761.96
21	TOE	N: 6435.32 E: 9526.24	6761.80
22	TOP	N: 6451.61 E: 9531.78	6765.28
23	TOP	N: 6429.71 E: 9550.31	6765.51
24	TOP	N: 6408.80 E: 9548.83	6765.51
25	MAINT. PATH	N: 6395.50 E: 9565.59	6764.84
26	MAINT. PATH	N: 6390.18 E: 9559.61	6764.84



**OWNER'S STATEMENT.**  
THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.  
*[Signature]* 5-3-18  
NAME DATE

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
*[Signature]*  
GLENN D. ELLIS, P.E.  
COLORADO P.E. 38861  
FOR AND ON BEHALF OF JR ENGINEERING  
DATE: May 3, 2018

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

UNTIL SUCH TIME AS APPROVED CHANGES ARE APPROPRIATELY REVIEWED AND APPROVED BY THE AGENCIES, JR ENGINEERING ACCEPTS NO LIABILITY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**RON COVINGTON HOMES**  
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BY	DATE	REVISION

H-Scale 1" = 10'  
V-Scale 1" = 1'  
DATE 05/03/18  
DESIGNED BY AJH  
DRAWN BY RAB  
CHECKED BY

ACADEMY VILLAGE FILING NO. 3  
**POND GRADING PLAN**  
SHEET 4 OF 5  
JOB NO. 25123.00

